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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/606,723 | 06/29/2000 | Shoji Hinata | 9319S-000151 | 7498 |

7590 02/27/2004

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Bloomfield Hills, MI 48303

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| EXAMINER |
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NGUYEN, DUNG T

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| ART UNIT | PAPER NUMBER |
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2871

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,723

Applicant(s)

HINATA ET AL.

Examiner

Dung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,9 and 21-23 is/are allowed.
- 6) ☒ Claim(s) 3,5-7, 15-17, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 4,8 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment dated 11/07/2003 has been received and entered.

By the amendment, claims 1, 3-9 and 15-23 are now pending in the application.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 3, 5-7 and newly added claim 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's submitted prior art, Nakamura et al., JP 11-174972, in view of Hinata, US Patent No. 6,369,865, as stated in the previous office action.

Although claims 3 and 5 as well as claim 20 are amended to recite the limitation of "the supporting frame supporting a periphery of the second substrate; wherein the supporting frame includes an opening arranged at a position corresponding to an interior-region of the second substrate" (claim 3) and/or "the illumination device includes a supporting portion extending from the base portion and supporting at least a part of a periphery of the second substrate, the supporting portion forming a gap between the second substrate and the base portion of the illumination device" (claims 5 and 20), such limitations are not sufficient to overcome its rejection in the previous office action dated 08/08/2003.

Applicant's argument, regarding claim 3, is Nakamura's spacers (i.e., black icons) do not constitute a "supporting frame" (amendment, page 11); however, Applicant provides no evidence to support such contention. It should be noted that such black icons are used to separate an illumination device (e.g. a light guide 93 and light source 94) from the LCD panel (91) as well as

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to hold such LCD panel. In addition, there is an opening between the light guide and the LCD panel (i.e., spacers between 91, 92 and between 92, 93). In other words, the black icons would have a function of a “supporting frame” as well and includes an opening arranged at a position corresponding to an interior-region of the second substrate of the LCD panel.

Applicant also contends that Nakamura fails to disclose a light guide having a base portion and a supporting portion supporting a peripheral region of a second substrate (amendment, page 11). The Examiner respectfully disagrees with Applicant’s viewpoint. It should also be noted that the base portion (e.g., light guide 93) and the supporting portion (e.g., black icon) are integral as shown in figure 4; therefore, the Nakamura et al. light guide would have the base portion and the supporting portion as same as the Applicant’s light guide.

Therefore, the limitation of such above claims met.

3. Claims 15-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant’s submitted prior art, Nakamura et al., JP 11-174972 , in view of Hinata, US Patent No. 6,369,865, further in view of Yanagawa et al., US Patent No. 5,870,160.

Regarding claims 15-17 and 19, the modification to the Nakamura discloses the claimed invention as described in the previous office action except for a frame section of the casing supports the second substrate with a gap on a side of the substrate away from the liquid crystal layer. Yanagawa et al. do disclose a case supporting (MD) having a frame section (element GC) (see figure 1). Therefore, it would have been obvious to one skilled in the art to employ a case supporting having a frame section of the casing supports the second substrate with a gap on a side of the substrate as shown by Yanagawa et al. in order to support an LCD panel without exerting excessive pressure on another part of an LCD device (col. 18, ln.27).

Allowable Subject Matter

4. Claims 1, 9 and 21-23 are allowed.
5. Claims 4, 8 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claim 15 have been considered but are moot in view of the new ground(s) of rejection as stated above.
7. Applicant's arguments filed 11/07/2004 with respect to claims 3 and 5 have been fully considered but they are not persuasive as stated above.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Nguyen whose telephone number is 571-272-2297. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN
02/07/04



Dung Nguyen
Patent Examiner
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